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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/632,741

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01/23/2008

EXAMINER

PERRIN, JOSEPH L

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

01/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/632,741

Applicant(s)

ACKERMAN ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,7,9-12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,7,9-12 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the amendment filed 15 November 2007, with respect to the §102 rejections over BARTOS have been fully considered but they are not persuasive. Beginning on page 4 of the instant response, applicant argues that BARTOS does not disclose the claimed washing system of claim 6 and points to the newly added language wherein "a first fluid is configured to be injected into an engine while the engine is rotated to facilitate removing particulate matter that is dislodged by the first liquid from the engine". As clearly pointed out throughout prosecution and in the Board decision, the recitation of liquids is not a *structural* limitation on the claimed apparatus. Moreover, the intended use of the liquids in the claimed apparatus does not define the structure of the claimed apparatus and is not given patentable weight. As discussed throughout prosecution and in the Board decision, it is fundamental that an apparatus claim defines the structure of the invention and not how the structure is used in a process, or what materials the structure houses in carrying out the process. *Ex parte Masham*, 2 USPQ2d 1647, 1648 (BPAI 1987). See also *In re Yanush*, 477 F.2d 958, 959, 177 USPQ 705,706 (CCPA 1973); *In re Finsterwalder*, 436 F.2d 1028, 1032, 168 USPQ 530, 534 (CCPA 1971); *In re Casey*, 370 F.2d 576, 580, 152 USPQ 235,238 (CCPA 1967). As long as the apparatus of BARTOS is capable of injecting fluids into an engine while the engine is rotated, the prior art apparatus meet the requirements of the claimed feature. Applicant has not established on this record any structural

distinction between apparatus within the scope of the rejected claims and the apparatus fairly described by BARTOS, and no such structural distinction is apparent.

2. On page 5, applicant argues that claims 7 and 9-11 depend from patentable claim 6 and, therefore, are also patentable over BARTOS. This is not persuasive because claim 6 is not patentable over BARTOS.
3. On page 6, applicant repeats arguments for claims 12 & 14-16. This is not persuasive for reasons of same indicated above.
4. On page 6, regarding the §102/103 rejection over BECK as evidenced by HODGENS and BARTOS, applicant repeats arguments for the intended use of the fluid and the intended use of injecting the fluid in an engine while the engine is being rotated. This is not persuasive for reasons indicated above regarding intended use in apparatus claims.
5. On page 7, applicant argues that claims 7 and 9-11 depend from patentable claim 6 and, therefore, are also patentable over BECK, HODGENS and BARTOS. This is not persuasive because claim 6 is not patentable over BECK, HODGENS and BARTOS.
6. On page 8, Applicant repeats arguments for claims 12 & 14-16. This is not persuasive for reasons of same indicated above.
7. On page 8, regarding the §103 rejection over MCDERMOTT in view of HODGENS, applicant repeats arguments for the intended use of the fluid and the intended use of injecting the fluid in an engine while the engine is being rotated. This is not persuasive for reasons indicated above regarding intended use in apparatus claims.

8. On page 9, applicant argues that claims 7 and 9-11 depend from patentable claim 6 and, therefore, are also patentable over MCDERMOTT and HODGENS. This is not persuasive because claim 6 is not patentable over MCDERMOTT and HODGENS.

9. On page 9, Applicant repeats arguments for claims 12 & 14-16. This is not persuasive for reasons of same indicated above.

10. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant has failed to provide any showing of structural differences between the claimed apparatus and the prior art apparatuses, much less any patentable structural difference. Accordingly, the apparatus as claimed is deemed unpatentable in view of the prior art of record. Applicant is urged to define the claimed apparatus by structure rather than intended use of the fluids and to point out how the structural limitations define a patentable invention by specifically pointing out how the structure of the apparatus claims patentably distinguishes them from the references.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 6-7, 9-12 & 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In independent claims 6 & 12, it is

unclear what is meant by the first fluid being “configured” to be injected. Configuration language is generally used in description of a structural configuration and it is unclear what “configuration” is meant with respect to the fluid or chemical component with respect to its use in being injected. Are there fluids which are not configured to be injected? As best understood, all fluids are capable of being injected and therefore all fluids have the requisite “configuration” to perform the claimed intended use. However, clarification and correction are still required.

Claim Rejections - 35 USC § 102

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

14. Claims 6-7, 9-12 & 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative as being obvious over U.S. Patent No. 4,059,123 to BARTOS (previously cited). BARTOS discloses the claimed structure of a turbine engine cleaning machine (10) including a pump (compressor 14), fluid reservoirs (18/20/22/24), and nozzle manifold (96) (see Figures 1, 2, 6, and relative associated text). As noted above, the non-enabling disclosure of “anti-static liquid” is construed to read on a coating liquid which would be capable of reducing the rate of formation of particulate matter, and the intended use of types of fluids used and operation of the apparatus are given little weight (see above). Accordingly, since the preservative coating of BARTOS would be capable of reducing the rate of formation of particulate matter (*i.e.* a coating would achieve this since the coating would prevent adhesion of

particles to, for instance, a gas turbine), the apparatus of BARTOS reads on applicant's claimed apparatus. Recitation of BARTOS reads on applicant's claimed invention.

Regarding the newly added language of intended use, such language is not afforded patentable weight in apparatus claims and does not serve to patentably distinguish over the prior art (see above in Response to Arguments regarding the claimed intended use).

15. Claims 6-7, 9-12, 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,944,483 to BECK et al. ("BECK"), as evidenced by HODGENS and BARTOS. BECK discloses an apparatus having a plurality of spray nozzles (11) on ring manifold (13) which are circumferentially spaced around an opening of turbine (1) and configured to spray a first fluid and second fluid radially inward via fluid lines (19/20). Regarding the claimed fluid reservoirs and pump, the position is taken that such structure is common knowledge in the art (as evidenced by the disclosures of HODGENS and BARTOS, *supra*) and one having ordinary skill in the art would have at once envisaged the fluid sources of the apparatus of BECK including reservoirs and a pump which store and supply fluids to be sprayed. Even if, *arguendo*, one were to take the position that such is not common sense to one having ordinary skill in the art and is not inherently or implicitly taught it would have been obvious to connect reservoirs and pumping means (as disclosed by HODGENS and BARTOS) to the fluid lines (19/20) of BECK to yield the predictable results of controllably supplying a first and second fluid to the spray nozzles of BECK. Moreover, there would have been a reasonable expectation of

success in combining the references to yield the claimed invention since they are analogous in the turbine art. Regarding the newly added language of intended use, such language is not afforded patentable weight in apparatus claims and does not serve to patentably distinguish over the prior art (see above in Response to Arguments regarding the claimed intended use).

Claim Rejections - 35 USC § 103

16. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

17. Claims 6-7, 9-12 & 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,273,395 to MCDERMOTT in view of HODGENS (previously cited). MCDERMOTT discloses an apparatus for cleaning a gas turbine engine (2) comprising a washing system using a plurality of spray nozzles (6/8/10/12/14/16/18) circumferentially spaced around manifold ring (20), the nozzles oriented to spray radially inward from the ring manifold (see entire document, for instance, Figures 1-2 and relative associated text). While MCDERMOTT discloses using a fluid reservoir (40) and pressurizing the reservoir to pump the cleaning fluid from the reservoir to the nozzles, MCDERMOTT does not expressly disclose first and second reservoirs. HODGENS teaches that it is known in the turbine cleaning art to provide two fluid reservoirs (12/13) in a turbine cleaning system in which the fluids are pumped to a nozzle assembly for washing a turbine (see Figures 3-4 and relative associated text). Because both MCDERMOTT and HODGENS teach washing turbine engines by

pressurizing fluid from a reservoir to a spray nozzle, it would have been obvious to one skilled in the art to substitute a single fluid reservoir for two fluid reservoirs to achieve the predictable result of applying plural and different treatment fluids (i.e. washing, rinsing, coating and the like) to optimize the treatment effect. Regarding the newly added language of intended use, such language is not afforded patentable weight in apparatus claims and does not serve to patentably distinguish over the prior art (see above in Response to Arguments regarding the claimed intended use).

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

19. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792

JLP